Notebook Series -- Notebooks by Edison
Notebook, N-13-11-22

This notebook was used by Edison during November-December 1913; one entry contains notations by an unidentified experimenter. The entries relate to a sequence of experiments, numbered from 15 to 90, which continue the experiments in N-13-08-14.2. They pertain primarily to the printing and transfer processes involved in disc record manufacture. Included are notes and results from experimental batches of transfers made according to different production schedules, different varnish compositions, or different preparations of the record blanks. Also included are descriptions of the various scrapers used in the preparation of the record blanks. Entry 55 directs Sherwood T. (Sam) Moore that "for present this is our Transfer & Printing Schedules." Another entry describes Charles Dally's "slot screen" experiments, which were intended to improve the quality of the screening of powder for the powder blanks. At the end of the book is an entry on the testing of "Dinwiddie's grafited tracked White Masters." The notes indicate that Walter H. Miller and Ernest C. Richter also assisted in the experiments. Inserted into the book are two loose pages of related notes by Edison. The front cover is labeled "Disc Records." The pages are unnumbered. Approximately 150 pages have been used.

No 15 Schedule

3 Minutes at 500 lbs with steam
Cool, 3 platens —

Many Buds III Has also outer red buds in row.

One has row red breaks over nearly the entire circumference.

Special Expt

2 C
1 Low
5 High 800 lbs – pressure
not held but allowed gradually
dis down to 125 lbs

OK
Bird III shallow

No 16

No Contact at top press leave in press 1/16 from touching. Hot for 7 min then bring up to 800 lbs for 5 min & Cool

Transfers 6 free 1 Stick 11

OK 11

3 Bands Top — 111

Sewrabbed Bottom 1

Red Centers, not Cod.

17 Sept

2 Control 1 Low 5 high 800

then drop press & cool.
free release —

OK.

Tops bad — bottoms pretty good

Study these —
Very Important

after transfer

1 plates 1/16 - see ridge plain
2 " 1/8
3 " 1/16
4 " straightened up 1/16 -
5 1/8 shrinks Lower — no (up) at rivet but is one at 2 1/2"
6 1/8 - 1/16 -
7 1/8 —
8 straightened up one way
9 low in center
10 nearly flat.
11 1/16
12 1/8 -

This shows plates about straighten up — after reject off

Prints.
OK II
Not filled in Music III inside edge Lubed
Cracks I

This proves plates after this Run Bad —

No 17 1/2

No 1 Schedule water
3 Continued runs at 800 - Coal.
Plates selected for Thicker
Varnish either 2 edge

1 =	(0) thick	1/8	higher in Center on back
2	"	1/8	"
3	"	1/16	"
4		1/8 - 1/16	" 1 inch near a rivet a little
5		1/8 -	1 rivet 2 1/2 from hole
6		1/8 - 1/16.	"
7		1/8	"
8		1/8	" has rivet 3/8 of 2 edge
9		1/8 1/16	
10		1/16 -	"
11		1/16	"
12		1/8	"

6 Transfers —
OK III

Steam pressure was 108 lbs —

Crack (Red) Comet I

83 % Run

This looks good

Should try

10 ~~Man~~ on 600 RBo-1
10 700 " not as good as 600
10 800 " not using spots

Probably Get up
500 @ 600

18 Sept

10 min on 500 lbs -
free ||||

OK ||| ||||

May be OK ||

Much better than the 7 min contact only.

Prints 6 66%

OK ||||
Not filled in Center Music 1.
Cracked in label 1

They sound pretty good
mostly velvet & only
1 had run out to amount
to anything —

We now put the 4 that have birds - Double transfers

No 19

No 1 Schedule

3 Contact 7 high 800

210 Degrees Fahr baked

plates —

Free III
Stuck 1

OK.11

Red Center

Birds both sides 1
Birds one side III

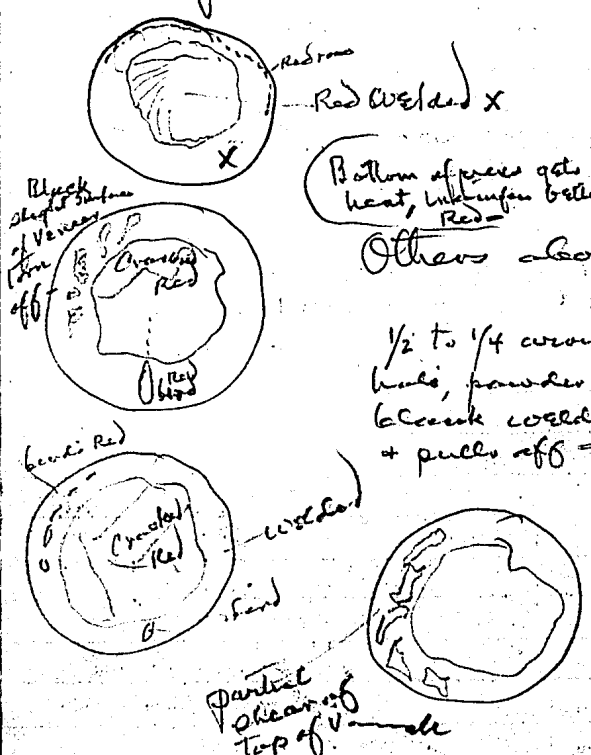
35 a/o

WG on this schedule

and do not really get
225 Fahr – none welded

Dup with
25 lbs Steam pressure

Transfer – Free Stick III



Bottom of press gets more heat, transfer better, less Red –

Others about Fair

1/2 to 1/4 around holes, powder off blank welded + pulls off –

partial clean of Top of V

Specially picked flat plate
No 20 (15) Even flow

Use only 5 to 8 lbs steam pressure

Warm up platens 5 min before putting in moulds

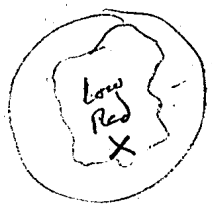
5 min Contact.
7 " 800 lbs –
Cool. only use
5 lbs steam –
New Machines Blanks –
Req Vac –

Transfers.
Squinted + unpressed the edge 1 – } 1 blank
" + Cracked blank 1

2" Long

Another just clears a contact no only allowed just unpressed on an shine –
ditto – The veneer no plastic air at equals but 800 lbs don't bring plank in adjusted
1 shows knees contact at edge 1 @ 1½ in
best where no contact veneer left plate
+ Cracked clean to Center

Moore thinks on account of low pressure we get back pressure from other press



fine — ////

There is promising if we can get X up & retap reed will get good transfer & no blurs — Fixed GEOR

~~We drop from 30 to 25 lbs and [illegible] of 5 [illegible]~~

Specially picked good plate
No 21 — (12) Even flood

New machine blanket Reg plates

7 min contact —
Then run up to 800 lbs & the moment needle shows 800 lbs go back to contact & cool —

Free ////
Slick.

Transfer —

OK None not enough
fell at Centers, Edges
OK fine —

Note for No 33
better than 22 for 33 work

No 1 - bend 1/16 x 1/8 3/4 from edge
points to center other side -
1/4 red band - in place - 1/4 from edge
Red Center - 4 @ 4 1/2 dia -

2 - bend 3/32 dia 1/4" edge

3 3/32 x 1/16 ⊿ 1/2" edge points low and point towards rim
Center low - second other small
bend - other side OK -

4 bind ▽ 3/16 x 3/32 points towards hole
best sharp end towards rim
other side OK.

Print -

OK All over 11 black

all filled. 1

Crack in music 1/8 way 1

Red Center filled Edges least
point music not quite filled } 11

peculiarly as Edges
filled

No 22 Corn flow plates

7 min contact then
run up to 800 lbs the
moment the needle touches
800 lbs cut off steam &
cool keeping pressure at
800 lbs

Use machine made blanks
& Reg transfer plates -
from Hill
slick

OK - 1

Binds both sides - 1
Bind one side 1

There is less red than 21 but of
black be got perfect think
21 be better as there won't be
bends — all the dif between
21 & 22 is that 22 has less
red. it originally was bad as 21
but longer pressure reduced the area
but original defect there but covered

Dallegs Transfers
Baked 5 1/2 hours Reg
Crew — 228 Tab.

768 made 615 OK —
153 discards —
80%

Prints of 23 = 1st Lot.

OK 1

possibly Convex ~~Concave~~ Convex ||||

Doubt is clipping on Edging

Due to not quite falling on extreme edge.

No 23. Even flow plates

3 min Contact — Reg Steam Press

7 " 800 lbs —

The plates used have been made Matte by Emory Cloth —

Use Machine Mounted Blanks

Free ||||

Stuck 1

OK ||||

Bind 3/4 from edge & round sied. 1

83%

Duplicate

Free ||||

Stuck

OK — ||||

Bind one side 1

Binds both sides 1

66

average 74½%

Transfers on hand - 084

Req Baked 235 1430
210 302
160° 200
200 134
260 49

Flavored 60 cc 35
70 cc 190
90 cc 51

~~730 - Dehydrated Resin 480° 100 gms 159~~
~~2 Para 4 Penta 3 6/4 - 145 alcohol~~

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731 - 100 gms Dehydrated 480° 142
2 para 4 penta 3.5. 6/4 145 al -

~~732 100 Dehyd Resin 480 167~~
~~2 para 4 penta 4 6/4 145 al~~

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733 100 Dehyd Resin 480° 200
2 Para 4 penta 4.5 6/4 145 al

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734 — 100 Dehy resin 480 200
2 para 4 penta - 5 6/4 - 145 al

~~735 100 Dehy resin — 157~~
~~2 para 4 penta 5.5 6/4~~

165 ✗

736 100 Dehy 480°
2 para 4 pentu 6 6/4 - 145 al

724 Reg Resin — 100 — (221) - 213
2 para 7.4 6/4 4 pentu 145 al

~~725 - 100 Resin (221) 2 Para 4 pentu~~
~~7 6/4 145 al~~ 245

~~726 100 Resin 221 - 2 Para 6 pentu~~
~~7 6/4 - 145 al —~~ 198

~~737 100 Dehy 480~~ 26 ✗
~~2 para 12 Pentu 5 6/4 145~~

~~722 - 100 Resin (206) - 1.4 phenol~~ 34
~~7.9 6/4 - 2 Para 4 pentu 145 al~~
~~1/4 Zinc Chl —~~

~~678 100 Resin 181 - 8.9 phenol~~ 12 ✗
~~8.4 6/4 2 Para 10 Pentu 145 al~~

741 — 100 Ethy 480 148 *
8 6/4 20 Penta 2 para
3 Dichloronaphthalene 145 al

742 1 gal Reg Var 20 grams 58
Phosphine 11

~~742 B 1 gal Reg V 189 grams~~
~~Phosphine 11 —~~

~~650 — 100 Resin 191~~ 23
~~2.9 phenol 7.9 6/4 2 para~~
~~4 phthalimide 148.4 al~~

651 100 Resin 191 22
2.9 phenol 8.5 6/4 2 Para
4 phthalimide — 148.4 al

652 100 Resin 7.9 6/4 2 25
para 2.9 phenol —
4 phenylphthalimide 148.4 al

699 — 100 Resin 186
3.4 phenol 7.9 Co/4 2 Para 26
4 penta 140 cal — Viscosity
7 min 4 sec

~~699A Dump 699 Except~~ 10
~~130 gms cal — Viscosity~~
~~16 min 44 sec~~

Note, the Even flow plates - Range can still be seen 1½ to 2½ from Edges - There is def of 003 -

Ring -

This is called Even flow plate but its not its 25% thinner

This yellow Edges we noticed on print on short schedule 1000 lbs & due want heat at contact & Unit blank not soft Enough

No 24 Even flow plates

20 lbs steam -

7 min contact -
Run up to 1000 lbs for 1 minute then back to contact & Cool.

Stick 11 free

Yellow Edges, Some places 3/16 wide - all around Edge - Note this - all have this -

Red Centers & places nearly to Edge round, Cracked bad in Red Centers stuck to plate in some cases where cracked in red Centers -

Cooks away from plate Noticed also low temperatures

1 has a blackband
1 " now red bands 1/4 from rim

1/4" all round Edge shows perfect weld - Edge too high -

No 25 -

10 Perula - 8.4% 6/4

Use ~~[illegible]~~ 678 Varnish Plates

3 min Contact

7 min 800 lbs - Cool.

free HM

Birds bath acidic HM

Birds one made 1

Note Excess Perula makes Birds,

12% - Perula 4 5 6/4 wood handle

above with 10% Perula but 8.4 6/4 is OK but for Birds -

Duplicated
By Mistake —

Rotten —

N026

Use 737 Varnish plates

3 Mm Contact
7 " 800 LCG —

Some attack

full birds and row around edge
Terrible pull outs,

One worst Example saved,

About 1/2 of Var pulls off after half stage at the rate of mm pulls off,

Rotten —

Not enough 6/4 + too much Penta —

27-

6 printed cloth. 8½ inch
Extra plate 10/ inc Check on top
of transfers

3 Contract
7 min 800-L60-

N9-

It looks as if birds
was due to low 6/4
should have Dehydrated
and 8 to 9 6/4 I guess

28-

Dehyd 3% 6/4 only
only change

730 Blanks —

3 Contract
7 mm 8000 lbs -

Free
steel
All — Shockhard

OK

Birds one side 1
" both sides -

Rotten — not
hardened — 6/4 too low —
Birds in big bunch

NG

Note 29 - 4%
make them good

29 -

Use 732 plates, neco blanks
Bthy 4% 6/4 2 pers 4 Pentu-

3 Contact
7 High - 800 160 —
Very Hard Stuck LHH

OK IIII

Bind one side II -

PHENOMENON 66%

Print

OK - II
Not filled battered II
Not filled small crack I
(Edge of fall
Edges Cracks I

30

Use 735 Delay 5.5% 6/4 —
new blank —

3 Contact
7 Height at 800 Lbs

Tree III
Stick III

OK

Burds both sides III I

Very bad long row red
Edges - bad bubbles —

Curious 3% 6/4 - not hardened
4% " hardened + good
but stick bad
5.5 Like 3% hard
but well cured + very
bad —

31

725 ~~[illegible]~~ plates
Delighted 7/- 6/4

3 Contact
4 Hough - 800 lbs
Free II
Oliveh IIII
OK. None —

Bird one side 1
Birds both sides IIII

Red ring bands at Edge 1

NG

Dehydrated
Resin seems
NG

726 plates 6 panels Dehy Resin
7% 6/4 —

3 Centrical
7 Hangh Good

Slick — 11

Black Tear bands
Yellow bands —
Edges bands long —
Crushed or cracked or
} all bad
} drawn

NG

I was OK on inside

Red Center 1

Although more 6/4 the
Panel is greater
May be pre-phenol —
[illegible]

Notice - the one print from seperated transfer are Red nearly all over — we separate 2 pp. no better for surface still Red

2 sheets came free of plates in bringing them over put them over a blank + permitted Record.

Record OK fair to good, surface NO ROuts -
Dally is trying make it practical to chill off -
Direct Cut on Rapdag -
RO are short & sharp.

Surfaces -

1 -	Loud -	fair	good -	faint Bad RO
2	"	"	"	
1	"	good	good	Start Bad RO
2	"	fair	good	Bad ROuts
1	"	fair to g	good	S + M.) Bad RO
2	good	good	good	Bad RO allow
1	good	good	fair	S + M Bad RO
2	fair	good	fair	S only Bad RO

The Varnish too thin on start squirted out too much in transfer — makes Run out

We print it 3rd time, 2 heat 2 contact + 7 high 1000 lbs — to stop red. — Print no better oil stops welding

33.

Possibly steam prevents welding -
Use Dally Sesame plates,
showed the outside up on Printing & also dissolved with Bang after
3 Contact.
7 High 800 lbs

OK IIII

Free IIII
Slick

all OK 100% -

Print =
OK. IIII
100%

not quite filled at Edge on some —
Can fix this -

Notes on transfers -
good fill No Red Centers - squeeze out Edge considerable - (1e) Varnish
1 has shade red center -
Varnish squeeze at Edge 1/4" or more
Moore Ansell Chemicals
Too much disturbance to Varnish makes RO

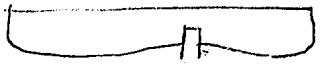
Where there is great squirting of Veneer, we get Run outs & thick —

Records

	Start	Mid	End			
1	Long	fair	good	RO	RO	fair *
2	good	fair	good	no	RO	no
1	good	fair	good	no	no	no
2	good	good	good	Bad,	RO.	no
1 —	good	good	fair	} — no RO		
2	fair	good	good			
1	Long	Long	fair	—	RO	RO fair Dunn
2	"	fair	good		RO	no no

Not near as bad RO as 33 — didn't squirt out like 33 —

34



4 New bowed scraper
to 21 scraper —

Rep plates —
3 Central
4 High 800.

OK II

Free II
Stuck I

One side Bind II

Red Centers, No Red Centers,
Edges look good —

50%

Print —
OK IIII — 100%

20 K has crack —
Evidently

No 35

Use 699 plates 16 mm 44 sec
Viscosity Reg Vare

3 Contrast
7 High - 800 lbs —

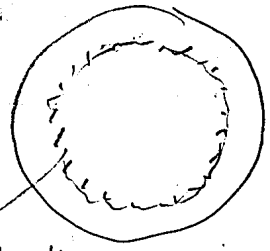
Free
Stuck IIII

Ok
Bunds bottom HHH I
Bunds one side.

Bad —

Phenomenon Even smaller spots
show them both sides
Bad row at edge of red team II 5.
Didnt fill - Red II

Varnish must have ridges
to get such bad results.



Red broke
just beyond 8½" plate
Bottom OK

8½ disc of steel
placed on top transfer-
plate only —

3 Contact
4 High 800 lbs

OK

free
click ////

Bottom OK where 8½ plate, red circle ////
Bottom on one show bad side ring
of breaks — other side bad ring ////

Side where 8½ disc is is only
side that click to plate,

No Red Centers —

37

Use 722 plates Reg
Except 1/4% ZnCl—
3 Control
7 High 600 lbs

Free ~~HH~~ HH
Quick 1

Ridge of Greatest birds bathouse HHT

One side of bundother 1

awful ring breaks out Edge

[redacted]

Varnish Not Black

MG

38

742 B plates 1
Reg-gal varn 189 primer
Phosphate
3 Contact
9 High 800

Fresh 1
Stock 1

~~Bundo Cathodic~~

MG Experiment
is only to get
Vencar Black & it
isn't

39—

6 50 plates 2 para 4 phthalimide
Reg 6/4 Reg V.

3 Contact
7 Rough 800

Free ||||
Stuck ||

OK 1

Burs one side 1
Burs both sides ||||

Bad Ring red burs 2 dge ||

Print –

OK – 11

Cracked starting in label going to [illegible] 1
Red centers 111 not filled in [illegible] not filled 111

All of filled

The surfaces are poor at Edges
& very good at Center
where red & not filled –

40

Reg plates, Use Gow scraper Blanks –

7 min Contact –
then run up to 800 lbs
the moment needle shows 800 lbs
go back to contact & Cool.

OK 1111 Free 111
stuck – 1

Cracked in Red Center one side 1

Large Red Centers in all –

Cooked Centers bad,

Great amount of gas or
Vapor undulated the
red cent

~~Print~~

OK 11

Red Spot on smooth Edge 1
Red unfil both sides in mouse 11

Red seen in Center
~~Red up~~

Edges well filled no Cracks

Printed - 2 Heat
2 Coneal
4 Hugh -

still Red, surface
fair some RO -

No — 41

Reg plates - Board Scraper blanks

7 minutes Contact. then
run up to 1000 lbs the
moment needle shows
1000 lbs go back to
Contact and cool -

Free 4117

OK 4111

Red Center,
Cooked not so bad as 40 a.
Considerable improvement but still a
Yellow edges - Crumbed

This schedule may be good for Reg transfers, on new blank for 44 45 46 Best Dallys is bad, I has very Good sharp run out,

42

33 Dally Sm plates. Board blanks if possible —

10 min on 500 lbs —

Free 11

OK 11 -

squared normal, but some is crinkled yellow & part transparent thick veneer been strained & Oz a RO -

Print, Wash Benzol before Print
2 heat
2 Contact
7 1000
Cool

OK 11 - Dallys RO + not good
one reg transfer quadrant
no RO —

N0043

2 plates of 33 on one new Chuck

1 plate of 33 on one side Regular roller

7 minutes at 500 lbs

Coat

This is pretty good

Think perhaps
500 is best.

44

Reg plates, new blanks —

10 minutes on 600 lbs Coal

OK ~~HH~~ I

Free IIII
Stuck II

Red spot both sides bad blank II
Lackfill both side same — II
No red II

Print,
OK II

RO weak only 3 or 4
have any

If blank were good
all would be OK —

Red center —
Crooked edge II
Not filled both sides edge II

Not near as good
as 44 —
Which pretty good

45

Reg plates new blanks

10 min on 700 LG

Trace HHH
Shiek - 1

OK - HH 1

Pretty good transfers —

Trace red 11
Black unfil 1

Print —
OK 11
Not filled → 111 No
Black Centers 11
Not filled next label 1

Considerably
RO — not extra smooth

If blanks were good all would be OK

800 is too much

5 6 or 700 lbs best

46

Reg plates new & Canada

10 mm on 800 lbs

Free ||||

Stick - ||

OK ||||

Birds - 1

Bad sinker deformation 1

Bird & both sides 1

Red Canada both sides 1

Fragments out much. some crushed

yellow 1

No Print

47

Reg plates neo blanks -
10 min 800 lbs -

drop back to 500 lbs
& Cool.

OK 11

Jaws 11
Stretch - 1

Bird - 1 one side
Small " - 1 one side
" - 1 one side
" " 1 one side

400 lbs is not enough
to fill + prevent Cooking
+ Weld

Wants 500 to 600 lbs

Prints - OK HHI
Cracked 1.

83%

Red Centers front II
" " Shiny 1

Cracked both sides near Label 1
Slight Crack margin
Edges look good

48

6 Transfers — 6 — Reg plates
new Blanks —

10 Minutes at 400 lbs
Cool

Print 2 heat, 2 Contact 3 at 1000 Cool

OK HHI

Tee
Slick HHI

No Bends

Red Centers, not quite fill HHI
both sides Cooked III

Evidently Matte plates prevents birds to a great Extent.

Moore is picking out 500 Matte plates to flow & we will use these in these Experiments as soon as we get them

because 10 min at 500 has twice been free of birds - but this lot has birds & the plates are Exceptionally bright

Prints, OK IIII
5 =

One transfer was descarded

both sides Red faint Center 1
Long Crack at Center & Crop at Margin 1

12 Transfers Reg plates
new blanks -

10 min at 500 lbs
Cool

Print 2 heat 2 contact 3 at 1000 lbs

Free IIII 1
Stuck

OK II
Bind one side II
Raw red birds Edge bind 1
Cooked both sides - 1

The plates are very bright paleish that have birds and the matte plates no birds - CO2 are up against Synthanesis, WS

4 Mattes OK
1 Bright OK

1 Moderate Matte Bad
3 Matte Bad
3 Pebble Bad

4 Bright 1 good 3 bad 25% good
7 Mod Matte-Matte, 4 good 57% good

50

12 Transfers - Reg plates new Blanks.

10 minutes at 600 lbs
Cool.

Print 2 heat 2 Contact, 3 at 1000 lb.

Free 1111
Stuck Easy
Slick -

1 Bright plate no red OK
2 Matte " " OK } OK

1 - Matte - slight red OK
2 Mod Bright " - Bird

1 mod matte, " Bird
2 Matte " Bird

1 Matte " OK
2 moderate Matte " OK } OK

1 Pebble - " 2 Birds -
2 Matte " Bad run red draw

1 Matte Red 1 time bird -
2 Bright " 4 Birds big -

92%

1 = Med Matte } OK
2 Matte —

1 Med matte } OK — slightly red center
2 Highly polished

1 Matte. } OK RO
2 Med Matte

1 Med matte } OK — Very Red Cooked
2 Matte

1 Matte. } OK — Red 1" × ¼ on Margin
2 "

1 Bright } OK
2 Bright

1 Matte } OK
2 Bright.

1 Matte } OK. — faint red
2 "

1 Matte } OK. — "
2 Bright

1 Bright } Bird } Comal — Red Light
2 Bright } OK

1 Med Matte } OK — large red
2 Polish —

1 Matte — } Bird
2 " } OK not filled center NG

Least record with Red Edge 3" long 1¼ wide
Blowing red edge 3" long
that a well like a comic probably

Prints
OK HH IIII 75%
not filled II
Cooked I

92% } 83% a
1 Comal

51 **51**

12 Transfers Reg plates new blanks —

15 minutes at 500 lbs
Cool

632 V 1564 -

Print 2 heat 2 contact 3 at 1000 lbs

12 Transfers — Free HH HH II
Stock

~~Print~~

	5	m	end	
1 - good -	Bad RO	RO	no RO	
2 good	none	none	none	
1 good	none	faint	none	
2 "	"	faint	no	
1 good	no	no	no	
2 good	RO	RO	no —	moved with cake
1 good	Bad RO	no	no	
2 good	" RO	RO	no	
1 good	RO	no	no	5
2 faint to 9	Bad RO	RO	no	
1 good	Bad RO	RO	no	
2 Good	"	RO	no	
1 V. good	no	no	no	
2 good	faint	faint	no	
1 good	RO	no	no	
2 good	no	no		

Red Edge 3" long (1¼ wide)
Cook Rg 9 good

1 Matte. } OK 83%
2 " }

1 Med Bright } OK
2 " }

1 Matte. } OK
2 " } fume red

1 Bright } OK
2 High Polish } Birds 2 } Comal

1 Matte
2 Matte } OK fume red

1 Bright } OK Big red
2 " }

1 Bright } OK
2 Matte } Bird Bad rhollow

1 Bright } OK
2 " } 1" at hole Red

1 Matte
2 Bright } OK

1 Polish } OK
2 Bright. } 3 birds – The one we put fingers in weaker

1 Med Bright
2 Bright – 3 birds } O – } Comal.

1 Matte OK
2 Matte – Bird } OK – NG

Not as good as 51 –
Walls lower pressure
longer heat,

52

12 Transfers Reg plates Neo Blanks

10 min 600 LBs – Coal.
Dup of 50 – Lot 1565 Vare 632

All very free – Free HH HH II
Sluck

Frzz ||||/||||/||

1 = Med Mat 2 Med "	OK.	slite Red. Stuck. None
1 Mat 2 Mat	OK	Cooked both sides Center
1 Med Mat 2 Mat	OK	1½" black not filled
1 Mat 2 Mat	OK	Cooked Bad blue Red Center, red margin not filled.
1 Mat 2 Bright	OK	
1 Med Mat 2 " "	OK.	Cooked Center Both sides
1 - Mat 2 Bright	OK	1 side 1½ x 2 not quite full
1 Bright polish 2 " "	OK.	½" black not fill
1 Med Mat 2 Bright	OK	1½ x 1 black not fill
1 Bright 2 "	OK	Slight red Center
1 Mat 2 Mat	OK	
1 Mat 2 Mat	OK.	

100%

53
Prints - RO
deducted
42% good
#54
74% good
#55
80% good

53 Dup 51

632-1565

12 Trans - Reg plates, neo blanks -

15 min 500 lbs — Coop —

Print 2 Heat 2 Contact 3 at 1000

	Start	Mid	End	
1 good 2 good	no Bad	no RO	no no	
1 good 2 good	Bad Bad	no Bad	no none	
1 V good 2 good	RO Bad	no Bad	no no	67
1 good 2 good	faint RO	RO RO	no no	
1 V good 2 good	no faint	no faint	no none	Cooked
1 good 2 good	faint no	faint no	no no	} good fill both sides
1 V good 2 good	VVVf no	VVVf faint	no no	"
1 good 2 "	RO Bad	RO Bad	no no	not filled Edge not filled "
1 good 2 good	no RO	no RO	no no	red good weld outside -
1 good 2 good	RO RO	faint faint	no no	not fill
1 good 2 V good	RO faint	RO faint	no no	6½ Red to Edge
1 faint 2 good	RO RO	Ro faint	no no	
Not filled ||| 66% — prints OK — OK |||| Cooked Center 1	5 no	6 no	24	

1 - Mat
2 Bright } OK black 92%

Freq. All
Not one stuck

1 Mat
2 Med Mat } OK Slite Red Center

1 Mat
2 Slitely Mat } OK Bird } NG Red ring

1 Bright
2 Mat } OK. Red ring

1 Mat
2 Mat } OK Red ring

1 Mat
2 Bright } OK Red ring

1 Mat
2 Mat } OK Black ring

1 Med Mat
2 " } OK Cooked ring red

1 Med Mat
2 Bright } OK Red ring -

1 Mat
2 Mat } OK 1/2 red ring

1 Mat
2 Mat } OK Red ring

1 Mat
2 Bright } OK faint Red ring

Print 11 - one saved to correct ring

54 =

12 Transfers - Use Bowed Scraper Blanks - Reg plates

15 min at 500 lbs - Cool

Print 2 heat 2 Contact 3 at 1000 lb

1 good	no	no	no	
2 "	vv	vv	no	
1 good	Ro	faint	no	67
2 "	faint	Ro	no	
1 good	faint	Ro	no	cooked
2 "	no	faint	no	
1 good	Ro	Ro	no	not fill -
2 "	Ro	no	no	
1 good	no	no	no	
2 "	no	no	no	
1 "	faint	faint	no	
2 "	no	faint	no	
1 V good	no	no	no	
2 good	faint	vv	no	
1 good	vv	vv	no	
2 "	vvv	vvv	no	
1 "	no	vv	no	
2 "	Ro	Ro	no	
1 "	no	vv	no	
2 "	vv	no	no	
1 "	Ro	vv	no	
2 "	no	no	no	

~~Prints~~
OK IIII
Edge Not filled II
Not filled Center IIII

40%

9 no 5 22

1 Mat 2 Mat	OK	slight red — Free ~~IIII~~ IIII Stuck II
1 Mat 2 Mat	OK	
1 Mat 2 Mat	OK	slight red ring
1 Mat 2 Bright	OK	faint red
1 Bright 2 Mat	OK	
1 Mat 2 Mat	OK	slight red
1 Med mat 2 "	OK	slightly red
1 Mat 2 Med mat	OK	slightly red
1 Mat 2 Bright	OK	
1 Mat 2 Bright	OK	
1 Bright 2 Mat	OK	slight red
1 Mat 2 Mat	OK	Red one side

100%

Note Prints, Looked Than 51 54
but less RO —

Moore for present this is
55 our Transfer &
Printing Schedules —

12 Transfers — Reg plates
~~Dis~~ New blanks

15 minutes at 500 lbs — Cool
Dont fall any below 500 or
go more than 20 lbs above
500 —

Print 2 heat
3 Contact.
! 5 min 1000 —
Note 5 min instead of usual 3.

1 four. 2 "	no Bad	no Bad	no four	1 good 2 "	no V	RO V	no no 67
1 four 2 four	RO no	RO no	four no 67	1 four 2 good	no VV	no V	no no
2 good 2 good	no no	VV no	no no	1 good 2 good	no R	no Ro	no no
1 good 2 "	four no	no four	no no	1 good 2 "	no no	VV no	no no
1 no 2 "	no no	no no	no no	1 good 2 Bad	Bad no	no no	no no
1 " 2 "	VV VV	no V	no no				
1 good 2 "	no RO	no no	no no				

Prints OK ~~IIII~~ ~~IIII~~ II 100%

14 no 13 no 21 no

Transfers
OK ~~IIII~~ IIIII

free III
~~Hand~~ stuck ~~IIII~~ I
Easy stuck II

~~B~~ piece pulled off edge III 75%

Reheard in Chem room
Surface twice as good
as heard in Ennis place
with his spks which is
20% louder & his machine
was running at unknown
high speed +

Records start cutting
his morning 15 hours
after 1st ~~deal~~ =

Use regular plates and
Our old 213 Blank
16 minutes at 500 lbs Cool

Print reg schedule —

	Run	Mid	End
1 Loud	no	no	no
2 Loud	RO bad	RO	faint
1 Loud	RO	faint	no
2 Loud	RO Bad	"	no
1 Loud	no	RO	no
2 Loud	RO	RO	no
1 Loud	RO	RO	no
2 Loud	RO	RO	no
1 Very Loud	Bad	Bad	faint -
2 fair	faint	faint	no
1 Loud	Bad	Bad	faint
2 Loud	faint	RO	no
1 fair	RO	RO	faint
2 Loud	Bad	Bad	"
1 fair	faint	faint	no
2 fair to good	"	"	no
1 Loud	Bad	RO	no
2 good	faint	faint	no
1			
2			
1	2 no.	0	12 no
2			
1			
2			

Evidently time will not
Cure too high a pressure

1 – } Cornel filled Edge red Center
2 –

½ } ng Edge full not edge red. Cooked

½ } ng Cooked Center Edge filled OK

½ Center ok Margin not filled. bottom

½ Cornel – Center ok Margin not filled

½ – OK – Center red ok Margin filled

½ ng – Cooked Center ¼ margin not filled

½ ng Not filled Center Much Margin OK

½ ng Cooked Center, Run filled

½ OK

½ Cooked C margin not quite filled

1-2 " " "

57

Use reg plates + Machine blanks

20 min at 400 lbs – Cool

Dont let it go below 400 lbs
or above 410 lbs –

Print 2 heat
2 contact
3 High 1000 lbs –

1 } OK Transfers Red
2

½ } OK Cont Red Cooked Center

OK " " "

OK " " "

OK " " "

OK Red center –

½ cooked center

ng – Round Red 3/4" cracked

OK Cooked

OK Cooked Center

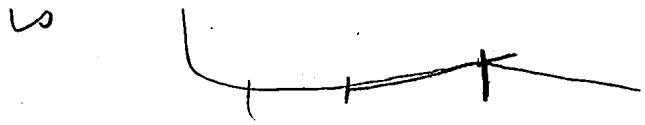
OK Red Center

OK Dark Red Center

OK Dark Red Spot

91½%

No 22 Scraper



Don't get rid of Red Ruiqp —

1	good	Ro	faint	no	
2	good	faint	"	no	
1	good	Ro	no	no	
2	good	no	no	no	No 4 bad [illegible]
1	fair to g	Ro not [illegible]	faint	no	
2	good	V	V	no	
1	good	no	no	no	
2	fair	Ro	no	no	mings
1	good	Ro	Ro	no	
2	good	no	no	no	
1	f to good	Ro	faint	no	
2	good	faint	faint	no	
1	Good	Ro	Ro	no	
2	Good	Bad	Ro	no	
1	fair	Ro	V	no	
2	fair	Bad	Ro	faint	
1	f to good	Ro	faint	no	
2	V good	faint	faint	VVVV	67
1	good	faint	faint	no	4
2	good	Ro	"	no	
1	good	Bad Ro	faint	VVVV	
2	fair	Bad "	"	no	
1	fair	Ro	Ro	no	
2	to good	Bad	faint	no	
		3 no	5	21	

58

Nos 70 cc plates 632 New Blanks

15 minutes at 500 lbs - Cool.

Print 2 heat 2 Contact 5 min 1000 lbs

1/2 } OK. Black lack fill Cloth

1/2 } OK

1/2 } OK Black lack fill -

1/2 } OK

1/2 } OK Bright - Bands 2

1/2 } OK Matte Band 1 red

1/2 } OK

1/2 } OK

1/2 } OK faint red lack fill

1/2 } OK

1/2 } OK

1/2 } OK faint red lack fill

81%

Free HHH
Stuck HHH

1	sharp-good	Ro	Ro	no	
2	Loud-	Bad	Bad	Ro	67
1	fair	Ro	Bad	no	
2	fair	faint	faint	no	
1	Loud-	Bad	Bad	Ro	
2	faint to good	Ro	faint	no	
1	fair	Bad	faint	no	
2	fair-	Ro	Ro	no	
1	Loud	V	V	no	
2	good	VV	VV	no	
1	fair	V	faint	no	
2	fair	Ro	Ro	faint	
1	Loud	Ro	Ro	VV	
2	Loud	Bad	Bad	VV	
1	Loud	+	faint	no	
2	+ to good	Ro	"	no	
1	Loud	V	V	no	
2	+ to good	Ro	no	no	
1	fair to	Ro	Faint	no	
2	Loud	Ro	"	no	
1	Loud	Ro	Ro	no	
2	V-good	no	no	no	67
1	good	no	no	no	
2	fair to g	V	V	no	
		2	3	19	

Use plates baked 260 degrees new blanks
15 min at 500 lbs - cool
dont fall below 500 or above
510-

Print 2 heat 2 Coolant 5 1000 lbs
big yellow cracked 3/16 square

1 OK -
2 OK — Not filled - red Cracks
3 OK
4 OK
5 OK
6 OK — faint red, not quite fill
7 OK
8 NG — Cooked
9 NG — Cooked
10 NG — Cooked
11 OK
12 OK — faint red

45%

Free 111 111
Slick 11

A Crunch due to hammer
one medium dont do it

1	good	faint	faint	no	
2	good	"	"	no	67
1	good	V	V	no	
2	good	V	V	no	
1	good	V	V	no	
2	good	V	V	no	
1	good	VV	VV	none	
2	good	Crunch	hammer Crunch	no	
1	good	VV	VV	V	
2	good	VV	VV	no	
1	good	no	VV	no	
2	faint good	RO	RO	no	
1	good	RO	RO	no	
2	faint good	RO	faint	faint	
1	good	V	V	no	
2	V good	RO crunch	V	no	67
1	good	no	no	no	
2	faint good	RO sharp	faint	no	
1	good	VV	no	no	
2	good *	no	RO	no	
1	good	faint	faint	no	
2	good	RO	RO	no	
1	good	Bad	RO	faint	
2	good	faint	no	no	

3 no 3 2

Middle - RO Caused by red + black same line

The surface are 1/2 the hardness of 56 old regulars but not velvet Except end of Record a white Gelles blank surface —

60

Use plates baked 210 deg New Pack 15 min 500 lbs — Coal dont fall below 500 lbs or go above 510 —

Print 2 heat 2 Contact 5 1000 lbs

1 = OK	Red Center
2 Consol	Cooked
3 OK	
4 OK	
5 OK	
6 OK	The 5 Contacts
7 OK	Slightly Cooked
8 Consol	" Cooked
9 OK shiny - Bind NG	
10 OK	faint red
11 OK	"
12 OK -	"

92%

Fress IIII
Stick IIII III

61

Used plates baked at 200 deg –
New blanks

15 min 500 lbs – Cool –
Dont go above 510

Print 2 2 + 5 at 1000 lbs

1/2 OK 1/32 bird } Comel	
1/2 ng	Cooked Center
1-2 – Comel.	almost cooked center
1-2 NG	Cooked Center –
1-2 OK	Square out 1/4" yellow
1-2 OK	
1-2 OK	1 blank lack fill
1/2 OK bright 2 blank NG	—
1/2 Comel –	Cooked Center
OK	Red Center
OK Comel –	Cooked
OK —	Red Lack face –

75 OK + Comel

Free IIII IIII II
Shoulders
Sheets

2 =

1	Loud	RO	no	no	
2	good	no	no	no	
1	fair	Bad	Bad	no	
2	good	Bad	Bad	no	67
1	Loud	RO	no	no	
2	good	No	faint	no	67
1	good	RO	RO	no	
2	Loud -	Bad	Bad	no	
1	Loud	Bad	Bad	no	
2	fair -	Bad	Bad	faint	
1	good	V	V	VV	
2	fr to good	Bad	RO	V	
1	fair	Bad	RO	no	
2	Loud	Bad	Bad	V	
1	fair	RO	RO	V	
2	good	V	faint	no	
1	fair	Bad	no	no	
2	fair	faint	RO	no	
1	Loud	faint	no	no	
2	good	"	no	no	67

Loud 6
fair 6
fr to good 1
good 7

Bad 8
faint 3
V 2
none 2
RO 14

General appearance rather Loud + RO rather bad —

With good new blanks this process can be made successful —

62

Print 12 Records with the Loose veneer —

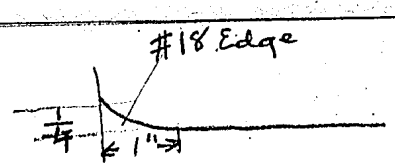
3 heat
2 Contact
7 minutes at 1000 —

Rehearing on Chem paper

		Cent	Cent
1	good	~~faint~~	~~faint~~
2	fair	RO	RO
1	fair to g	RO	no
2	good	RO	faint
1	good	RO	RO
2	good	RO	faint -
1	fine	no	no
2	fine	V	V
1	good	no	no
2	fine	no	no
1	good	no	no
2	fine -	V	no

new reader

67



rather Loud surface on Ernie was due to its running covered 100 Res & a 20% Lowder reader

Tested on Ernie speaker at first his reader 20% Louder than in Chem room speaker —

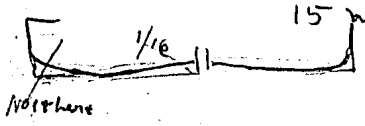
Tested in Chem room again

1 good 2 fine 1 fine 2 fine 1 good 2 good	No Runouts on any adj. Velvet, —

Just as good that Geller Chem Standard Double Transfer model —

23 Draper 55 Schedule -

632 1565 -



15 min at 500 lbs, coal.
Free III
Stuck III

1	OK	faint Red Center
2	OK	" Red Center
3	OK	" "
4	NG.	Cooked too much. Red ring
5	OK	
6	OK	Light red Center
7	OK. 92%	"

Print - 2 heat 2 Control 5 lbs/in

1	faint	no	no	no
2	good	no	no	no
1	good	RO	faint	no
2	good	no	no	no
1	good	V	no	no
2	good	faint	V	no

Fair for RO, + surfaces -

Skraper not changed shape —

55 Schedule

18 Scraper (1/16 covered or moved)

Transfers not Expected

Took 25 men to pack it —

~~Print~~ Transfer

1 = filled on Margin — faint red color

2 " " "

3 " " "

Print	1	good	V	V	no
	2	f to good	RO	RO	no
		"	V	V	no
	1	good	faint	V	no 67
	2				
	1	good	VV	V	no
	2	good	RQ	RO	VV

55 schedule

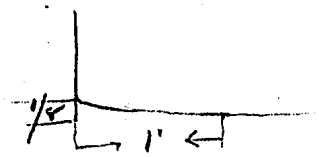
Reg scraper bent

lowered 1/16 by lowering
rotating shaft — Stuck 1
" free 11

OK- slight rod + even 5"
OK " " "
OK slite bend Comal " "

No improvement

63 —



Newscraper
NO 24 -

Yellow Edges —

Free 11
Stuck 1

1 OK - V former red
2 OK V "
3 1 Row red bunches at Edge NG.
24 bunches on other side.

Print -

Print, Inspection

1. OK
2 OK slight red Cracks
3 OK
4 OK
5 NG Red Spot music not fill
6 OK
7 OK
8 NG slight red Cracked in red at label
9. OK

3 were Cooked + thrown out

Surface 1 good	RO	faint	
2 good	V	V	
1 fine	backfill	none	
2 fine	"	none	
1 good	V	VVVV	
2 good	RO	faint	
1 fine	faint	faint	
2 fine	no	no	
434 very good 1 very fine	no	no	434 would dance
2 good	no	no	
1 good	RO	no	
2 fine	faint	no	
1 fine	V	V	
2 good	RO	no	
1 good	faint	VVV	
2 good	Bad	RO	
1 good	Rd	faint	
2 good	faint	VV	

Dup ct

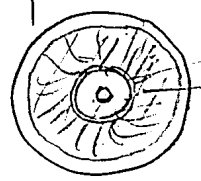
Surface very soft like Celluloid or a double transfer —

Believe air cushion non anchor will do = want thicker oil as it anchored in place.

Expt 64

55 Schedule

Try Experiment put sesame on



smooth side to have sesame but none on label

on veneer as well only around Label on smooth part of Rim —

Then playing on music will have no contact with blank — an air cushion —

1. Doubtful — Cooked both sides
2 OK — Red on 1/2 Dark on music label —
3 OK — both sides faint on music
4 OK — Red faint on music
5 Cracked — 1 side " other side 3 X 3 near edge Red faint red on music
6 OK
7 — Cooked — or cracked other side big left
8 OK — Red on music —
9 OK — Red on music no red label
10 OK — alite red on music
11 — Cooked + Cracked
12 OK — Red dark on music

12 new blanks - Rubbed hard on both faces by dump of graphite or lead pencil so all tools disappear being filled with graphite

55 Schedule Transfer - print —

66

12 Transfers

Straight Scraper on
Reg ~~for Machine~~

15 mm at 500 lbs

Print 2 heat 2 Carbed 5 1000 lb

Last night we tested some
55 Schedule Transfers present —
In Ernies room with his speaker
All were very loud & bad RO
We were scared —
This morning brot Ernies
speaker to Chem room — tested
it against our reg here —
found it 20% louder —

Also retested some 55 schedules
found surface & RO good
most of them better than
surface of our standard
Double transfer record —
Afterwards found trouble
in Ernies unit which was
probably running over
100 Rev — so RO & surface
are good

Also found many record
Cut that did not last
night in Ernies room

4

Think Double transfer would be OK if out blank was flat & same already

But Edges weld on 1st transfer & stuff Cant Cook out,

67

Take 67 55 Schedule transfers & put another transfer over them using 55 Schedule transfer & found

Double Transfer —

1 —	Cooked	Cooked on 2nd Trf
2	Cooked Cracked on 2nd	Red both sides
3	Cooked on 2nd transfer —	Red both sides
4	Cooked on 2nd "	Red - Cracked both sides
5	Cooked, both sides, Cracked 1 side	Second Transfer
6	wrinkles - NG	
7	Cracked both side bigreed only on 2nd transfer	
8	Cooked - both sides + only 2nd transfer	
9	Cracked, Cooked both side bigreed only 2nd T	
10	Cooked both sides, bigred only 2nd Transfer	
11	Cracked " " " "	
12	Cooked " " " "	

This 55 Schedule does not make a double transfer on New blank Its a failure Most of red in Center

Print - Inspection.

1 OK
2 OK
3 OK
4 OK
5 OK
6 OK

1/2 good four	Ro Bad Ro	found Ro
1/2 good four to quad	Bad Ro Bad Ro	Ro Ro
1/2 good good	no V	no WWV
1/2 good good	Bad Ro Ro	Ro Ro
1/2 four to good	found "	found "
1/2 quad	Horrible Bad	Bad Ro Ro

68

Transfer 6 machine blanks with Dallyo heat forward transfer plates

15 min 500 lbs — Cool

Print 2 heat 2 Control 5 1000 lbs

Transfer inspection.

1/2 OK	1 1/4 from rim both sides Red
1/2 OK	1 1/4 Outer red 1 side part other side
1/2 OK Except Crack	3/4 Red 1 side red in split
1/2 OK	slight red - good
1/2 OK	slight Red good
1/2 OK	slight red

Millers Tracked blank hot + Cold last night on Ernies Spks + over 100 Rev Mac sounded like a Godsa Yard + very bad run out due to over 100 speed + not noticed at the time -

Next day a new print tested on Chem room showed pretty good surface + some RO

This pm printed on Reg Green Double Transfer show very fine soft surface only VVV faint RO both sides -

The Master is Evidently OK as far as general surface is Concerned + Perfectly Satisfactory -

69 -

Use Miller Warm + cold blank in printing use new blanks Transferred on 55 Schedule

15 min 500 LBs - Cool
Print 2 heat 2 contact 5 1000 LBs

Double Transfer is slightly softer than 69 - + has less Run out but there is not a very great difference - If we had a good blank + got rid RO think the difference would be quite small -

Must get smooth surface + Even blanks to equal the Reg Dou Transfer -

Marked D for Cooked-doubtful —

Print =

Blanks made by special schedule
3 mm Coulter 7 mm 1000 lbs —
Used 18 scraper

Transfer 55 Schedule
15 mm 500 lbs —
Doubtfull any below 500 or 90
above 520 — 632 Van 1567
Free all —

Print 2 heat 3 Coulter 5 1000 lbs
Transfers —

OK —	Big red Center.
OK	" " "
~~Doubtful~~ —	Cooked both sides
OK —	Big Red Center
~~Doubtful~~	Cooked Center
Cracked — 29 —	Coulter "
OK	Red Center.
OK	"
OK — D is for Doubtful	"
OK — marked the blanks	"
OK	"
OK	"

Extra time did no good in this case —

New Machine blanks
55 Schedule T + Print

Weak musical records —
a test —

1 = Instrumental Kathleen Mourneen
full of knocks + crackles — general
surface ok — should have new
one — Much improved after washing
that's the knocks —

2 Sweet spirit hear prayer — Instrumental
start horrible noisy
knocks all thru enjoy 3 or 4
together — Lots knocks —
after washing start is very
much better whole record
is better — + not so bad —
RO at start

Prent. inspection —

1 = OK very dark red
2 OK "
3 OK Black
4 OK "
5 OK "
6 OK

7 OK - black -
8 OK - 1" crack not filled Cook
9 - NG Cooked, Label
10 OK
11 NG Cooked cracked Label
12 OK -

1 faint to Good 2 good	no faint	no no	
1 V good 2 good	no no	no no	
1 good 2 good	no no	no VVV	
1 good 2 good	no faint	no no	434 67
1 V good 2 good	no no	no no	
1 good 2 V good	faint faint	no no	67 434
1 good 2 good	VVVV VVVV	no no	
1 good 2 good	faint no	no no	67 434
1 fair 2 fair	RO RO	RO RO	S 18 1 G
1 good 2 good	VV VVV	no V	
1 good 2 ft to good	no RO	no faint	
1 good 2 good	RO VVV	no no	

Make doz new Blanks machine with 1/8 inch 180 mesh on bottom 1/8 on top —

Transfer 55 Lake Coke
15 mm 500 lbs — Coal

Prent 2 Heat 2 Contract 5 — 1000 lbs

Transfer —

1 NG	Cooked Cracked		
2 OK	Very dark red		nearly all black
3 OK	"	"	"
4 OK	"	"	nearly all black
5 OK	"	"	"
6 OK	"	"	"
7 OK	"	"	"
8 OK	"	"	"
9 OK	"	"	"
10 NG	Cooked both ends		cracked
11 OK	Very Dark red		"
12 NG	Cooked, Cracked -		

The finer powder helps fill Centers

80%

doz blanks made in Machine
all the powder being screened
thru 180 mesh —

Transfer 15 mm 500 lbs -

Print 2 heat 2 Contract 5 1000 lbs

74

Duplicate of 64 Expt —

Dally make tools to do quick + good job with Sesami - but want little more on —

Transfers inspected —

1 Ok Cook - Red over whole label + some
2 Ok Red on label read some more
3 NG Cooked a wacker
4
5 No use —
6
7 Black 2 1/2 from Edges
8 inward
9
10 Dont do the Egg
11
12

N G

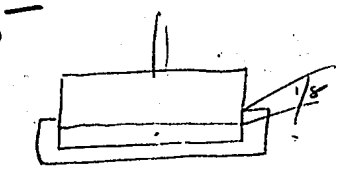
No print

Print — Inspection —

1 OK — little useful on monogram
2 OK — no red
3 OK — Black
4 OK — "
5 OK — "
6 OK — "
7 OK — Black
8 OK
9 OK — Very dark red
10 OK — Black
11 Cancel — weak print

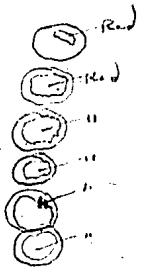
1 good 2 good	no faint	no faint	weak Print
1 Good 2 "	no RO	no RO	
1 good 2 good	faint "	faint no	
1 good 2 good	✓ VVV	no no	
1 good 2 good	faint RO	no ✓	
1 good 2 good	VV	no no	
1 fine 2 fine —	no faint	no no	67 434 13
1 good 2 good	✓ VVVV	no no	
1 ✓ good 2 good	VVVV RO	no RO	
1 good 2 good	no no	no no	
1 good 2 good	faint RO	✓ VVVV	

75



25 Scraper —
15 min
500 lbs Coop.
Print 2 heat 3 Contact 5 1000 lbs —
Transfers. = They had a black Edge
3/8 to 1/2" wide

1 = OK
2 OK
3 OK
4 OK
5 OK
6 OK
7 OK
8 OK
9 OK
10 OK
11 OK Little Cooked Cancel
12 — Cooked up replit.



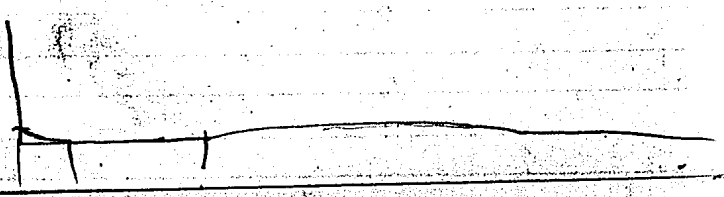
Black Centers
2 1/2 to 3"

Probably
Great Formic —
See 76

Print well show of Edges filled —
83%

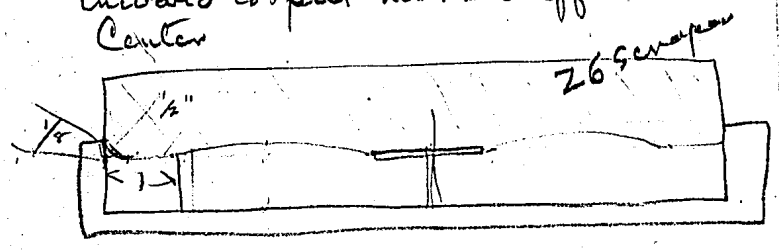
Ulloors - made as a preliminary trial 3 records missing as 76 - They are all ok & fine — missing records —

1	faint good	VV	no	Red Center
2	good	V	no	
1	fine	no	no	67 -
2	good	faint	faint	
1	faint good	RO	faint	
2	good	VV	no	
1	fine	no	no	
2	fine	no	RO	
1	good	VVV	no	The spot not filled
2	good	VRO	V	Red one side
1	good	faint	no	
2	good	no	RO	Lenfil red spot
1	good	RO	no	
2	V fine	faint	faint	
1	good	no	no	
2	good	VVVV	VVVV	
1	good	no	no	
2	good	faint	VV	
1	good	no	no	
2	good	faint	V	
1	good	faint	VV	
2	fine	no	no	
1	good	V	no	
2	V good	no	no	



76

Reg plates, new blanks made with straight scraper, bowed inward to put more stuff in Center



15 Min 500 lbs - Coal

Print 2 heat 3 Contact 5 1000 lbs
Thermofax 10 OK 2 Crooked dark red very

Print inspection
1 OK Marginfilled - very dark red
2 OK " " — only a red spot
3 OK " " larger spot
4 Doubtful. - underfilled after and missing -
5 OK filled no red
6 OK filled no red
7 NG Crooked Center. — probably due telling scraper
8 OK filled - Red places
9 NG - round spot in missing not filled
10 OK filled smell very dark red
Break
11 OK "
12 OK " Red Center on back but print looks OK

Note – WE washed the seconds in soap & water – then they no longer cut ? ?

Stripped Veneers printed directly on new blanks #18 –
3 min heat
2 Contact
10 at 600 lbs –

1 good 2 good	faint "	no faint	
1 Cuts – 2	—	—	Cooked + stretched
1 good 2 good	✓ ✓	no no	new master m
1 V good 2 good	no faint	no no	Cuts little
1 good 2 good	no faint cuts	no ✓	Cuts little
1 V good 2 good	no no	no no	

Moore says they buff transfers as stuff cooks out + causes cuts – Cant do it with this – probably a solvent take muck off –

This Veneer process is very promising + certainly can be made a success –

1 NG not filled 1" dia in mouth
2 NG Bad fill near label
3 NG Cooked center
4 Cooked - red label
5 OK
6 OK

no use going thru the 6
NG,

To get flatter blank both longer heat & pressure wanted
see run 79.

#78

12 New blanks 18 dampers

3 min Contact 5 min at
2000 lbs

55 Schedule on transfer

15 min 500 lbs Coal
632 Van 1570

Print 2 heat 3 Contact
5 min 1000 lbs —
Transfer inspection

1 OK	still required	center
2 OK	"	"
3 OK	"	" slightly cooked near edge
4 OK	"	"
5 OK	"	" almost a Cook
6 OK	"	"
7 OK	"	" Cooked
8 OK	"	"
9 OK	"	"
10 OK	"	" Cooked
11 Cracked mold	"	"
12 OK	"	"

Evidently no amount of high pressure will correct or make even 719 provides blank.

Print ~~[illegible]~~

1 good	no	no	Discard for RO
2 good	Ro	VV	
1 good	V	VV	
2 good	faint	no	
1 good	no	no	Good 13
2 V good	no	no	Very good 2
1 fine	no	no	FINE 7
2 fine	no	no	Very FINE 3
1 good	no	no	No Run out 13
2 Very fine	no	no	VVV faint 1
1 fine	VVV	no	V " 5
2 fine	no	no	faint 3
1 good	V	no	Run outs 2
2 V fine	no	VV	
1 good	no	no	
2 good	faint	faint	
1 good	Ro	Ro	Discard for RO -
2 fine	no	no	
1 fine	no	no	
2 fine	faint	VV	
1 good	V	V	
2 good	V	V	
1 good	V	no	
2 V good	no	no	

83% good to shipping Dept for surface & RO's -

This is fine -

Note difference between 78 + 79 in pressure + time in making blanks

Count (12 in screening) this lot had Extra fine powder

79 - BANNER S S

79 - fine powder — blanks made at 3 men Contract

7 men 1200 lbs - Machine loaded

18 scrapers -

Circumference 55 Schedule

1 OK	Dark	Red Center	
2 OK	"	"	
3 OK	"	"	
4 OK	"	"	
5 OK	"	"	
6 OK	"	"	100%
7 OK	Very "	"	
8 OK	Very "	"	
9 OK	Light	"	allowed cooled
10 OK	Dark	"	
11 OK	"	"	
12 OK	Darker light	"	

~~Print inspection~~

1 OK
2 OK
3 NG not quite full edge
4 OK
5 OK
6 OK

7 OK
8 OK
9 OK
10 OK
11 OK
12 OK

Prints - 91.6%

Note To get it as good as this varnish must be even flow + packing blanks good

Print Inspection
1 OK Red on graft, black on Edge at Label
2 OK "
3 OK "
4 OK "

1	good	no	V	
2	good	V	VV	
1	fair	RO	RO	
2	good	RO	RO	
1	good	V	red	
2	[illegible]	V.V	no	
1	good	V	V	67
2	V good	VVVV	VV	new matter used

Surface not so good as all black + welded

80

4 Blanks 719 fine powder
3 Contract 5 min 1000 —
Use 2 cog plates — grafted both sides except Edge & Shade
15 Mem 500 lbs — Coal
Print 2 heat 2 Contact 5 1000 lbs

Transfers repeat.
1-2 OK (Q) Red about
1-2 OK chemical on Edge, Label nearly used
1-2 OK " " used of Label
1-2 OK nearly what was wanted,

This shows if proper blank & proper rigging for grafting this process can be carried out commercially easily.

409 Domestic wax has Run out
like 416 – not many small snaps
RO is rather loud –

411 Domestic wax same RO as
in 409 – + more snaps – ||||||| big knots

412 Domestic wax RO vvv faint
full big defects on steel + snaps
at intervals –

411 Dup print Big RO – snaps lots –

409 Dup print ||||||| – Surface plain
left no RO –

81

6 Smooth moulds – 3 foreign
wax 3 Domestic wax
printed, on Double transfers
from Matrices —

416 – foreign showed on old machine,
a grind each revolution, faintly RO
but hear surface
lost little small sharp crackles faint –

415 foreign – has a RO like a dull grind
can just hear surface – full snaps

413 foreign, surface can hear louder than 415
has some RO, grind a little
snaps + some crackly – has plenty volume
there are ||| lapillus

413 Smaller print – Very Bad RO, probably
Bleach – surface much louder

Cartell anything
about a smooth blank.

82

6 Domestic + foreign wax
like 81 Cut primed on
Reg Schedules 719 Mach-
+ 515 schedule — 18 scraper

Domestic 411 - Same RO as 81
Velvet surfaces - has snaps

No 2 proof 411 - Same RO as in 81
Surface little dandy -

Domestic 409 RO as in 81 - surface faint
" 409 Dup RO less " " "

Domestic 412 - Very bad RO -
" 412 2nd proof weak RO. snaps.

Foreign 413 - weak RO - surface weak Snaps bad
413 2nd pt Bad RO " "
413 3rd pt Bad RO snaps + sounds of dint

Foreign 415 RO like in 81 surface faint
415 2nd weak RO surface only faint

Foreign 416 RO sounds like Cutting " " "
416 2nd RO " not so bad " "

Dup – but blank made on 3-7 only
1000 lbs instead of 1200 – B. press

1 = Discard Run red for accidental marking
2 not filled to margin
3 Doubtful not filled to rim in margin although it may be OK –
4 not filled Edge
5 OK
6 OK
7 OK
8 OK
9 – NG Red rim –
10 OK. red Edge
11 NG Red rim –

7 19 fine powder use 26 screenpart
Blanks 3 min Contact 7 min 1200 lbs
Cool

Transfer

Use mag plates 15 min at 500 lbs Cool

Print

2 Heat 3 Contact 5 at 1000 lbs –

Print inspection –
1 Doubtful – red Edge. many hairs RO Run
2 " Slight red on rim, many RO
3 " no fill up to Edge of music
4 Discard – Red blotches near rim band
5 OK
6 Doubtful not quite fill to Edge music
Dup 7 not filled to Edge of music
8 NG Bad fill, Red 6" long 1½ wide
9 not filled to Edge of music
10 "

Test for flatness of Records of 72 -

1 = almost flat OK.
2 OK perfect,
3 20/1000 high in Center Letter G mouldy
4 " " Nos 2 & 14 moved
5 OK perfect,
6 OK perfect,
7 Dished 25/1000 - dish side down Is OK
8 OK — perfect,
9 OK - perfect
10 - nearly flat, Extreme edge Turned up on 1/2
11 — Red Cracked center — out —

Remarks — Nov 22 1913

Up to date, the following proves best + to obey fence

Phenol resin 4 Wood to 1 Resin - Resin 5% 6/4 - Double ground to give 50% passing Thru 200 mesh

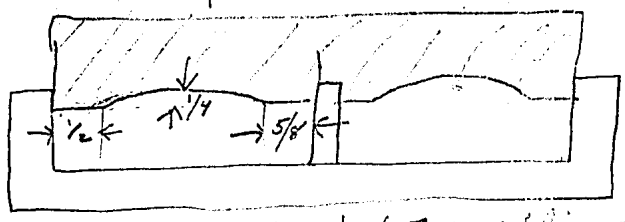
Machine, Jar loading —
Pressed 3 min Contact
7 min 1200 lbs —
Scraper flat with 2 concave
Called 26 scraper
Top plates put in by machine &
blanks Extracted by hydraulic
Extractor — Blanks Baked
1/2 hour at 180 Fahr

Transfer Reg plates 45CC 632
Varnish 15 min 500 lbs Cool -

Printed 2 heat 3 Contact, 5 1000 lbs
Cool -

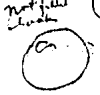
84

New Scraper No 28



9 heat 5 1000 lbs

Transfers –

1 OK — no red
2 OK — "
3 OK — "
4 OK — not filled. 4 darkened
5 OK — not red
6 OK — 2 spots darkened
7 OK — not filled dark.
8 OK — not filled dark red not filled
9 OK — 
10 OK — Red both sides –
11 - Doubtful — Darkened not filled
12 OK

See 86 – 1/4" too narrow

85

Duplicate lot – 3 Cont 7 at 1000 lbs –

1 NG not filled 2 edge 3" long 1 1/4 wide
2 NG "
3 NG "
4 NG "
5 NG " Very Good
6 NG "
7 NG "
8 NG "
9 OK
10 OK

Not tested Scraper

wrong

27 Scraper 85

Reg plates Machine Leaded 6 Scrapers
27 Scraper 55 Schedule 3-7-1000 lbs
15 mem at 500 lbs – Print 2 heat 3 Control
5 at 1000 lbs –

Prints.
1 OK
2 OK
3 OK Redish Cauliflower 1 place not filled 2 edge nearly to memo
4 OK Redish Cauliflower
5 NG – Red 2 edge not filled both sides
6 OK
7 NG Red Cauliflower – not filled to Edge of memo
8 OK
9 OK redish Cauliflower
10 OK
11 NG not filled Enough at 2 edges – redish Cauliflower

No test Scraper

wrong

26 Scraped
Felt so far
too Concave
1/8 high in
Arch

28 Scraper 86

Prints Inspection

1 NG not filled in Music
2 NG " "
3 OK
4 NG " "
5 NG " " 5 OK
1 Cancel
6 OK
7 Cancel 6 Discard
8 OK
9 OK
10 NG " " "
11 OK
12 NG Doubtful. Edge not filled.

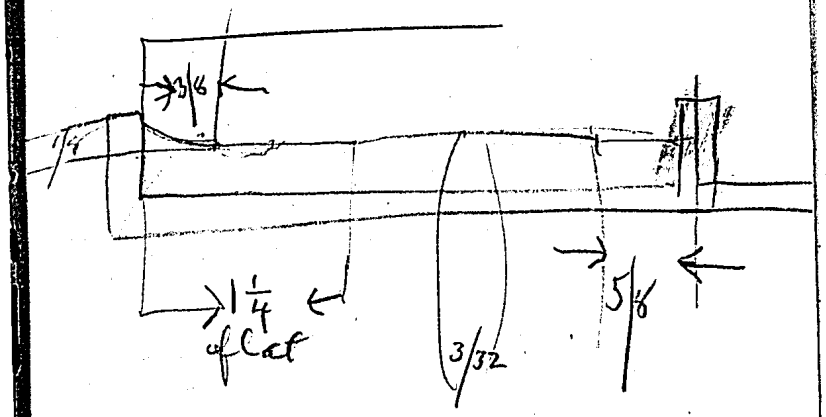
2nd Lot. - Duplicate

1 OK
2 NG not filled, Outer Edge of Music
3 OK
4 OK
5 OK
6 NG " " very bad
7 OK
8 OK
9 Cancel Only filled 1/8 beyond Music
10 NG Too light on fill on Music
11 OK
7 OK
1 Cancel

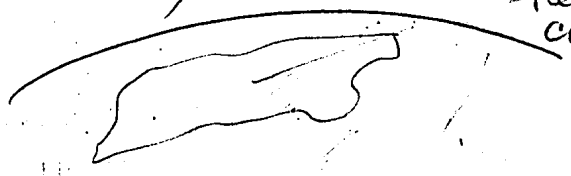
Too much in Central 3 Discards
parts Cant fill Edges
& paint Music

83 1/2 Dcep 83
3,7 mm 1000 g
1200 Lbs

No 30 Scraper



12 Transfers Red varied position principal trouble



Red blew up cracked

#87

Dallys plates

45cc 632 Lot 1574
2½ baking. 240 Fahr

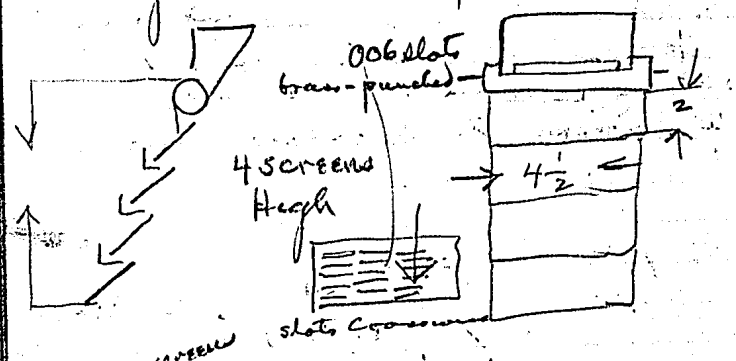
Put plates in warm Covered truck after flowing & sucked by blower the Alcohol Vapors out
Did it in one hour —
30 scraper 3.7 + 1200 lbs — 55 [illegible]
3 hard release — P.

1 OK black want fill
2 NG big red piece split off — tears —
3 OK black unfil
4 NG 2 bends & Cracked at Edge
5 OK Red spots.
6 OK "

The fact that hard release on this & tears & not welding good is due to too short baking —

No Print —

Dallyo slat screen Exponto



passes over screen 100 grams per minute.
of 700 lbs in 20 hours over a screen
One foot wide = 4 passes - or using
16 screens or one pass

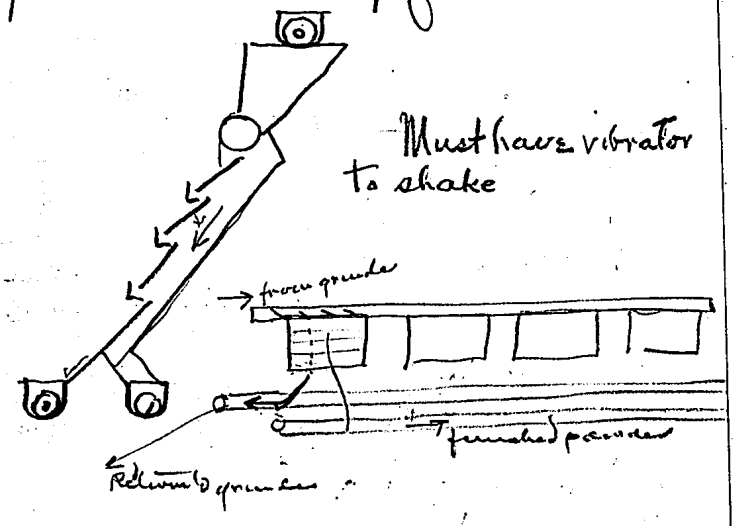
Tested 50 grms 719 powder.

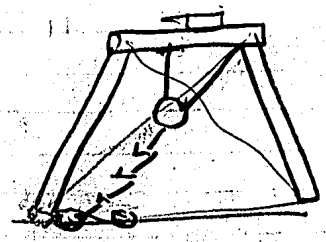
1st pass	20.5 grms went thru	$12\frac{1}{2}$ grms of which passed 200 mesh screen	
2nd pass	8.2 grms went thru	4.8 thru 200	
3rd pass	3.3 "	1.6 "	
4th pass	2.3	1.1 "	

It is probable that only the stuff that went thru on 1st pass is what we want,

This gives 60 grms per pass per foot of width, per minute

60% must be reground =
480 lbs in 20 hours one foot wide
for 12000 blanks requires 8000
lbs of powder - Requires
4 screens Each 4 feet wide.





Dallys final Expts Accuracy powder —

Used the 4 way 2 X 4½ 120 mesh wire screens set at angle of 75° deg

50 grams ~~[illegible]~~ of the 4.9 fine powder used Run them on 47 seconds —

17.9 grams went thru. of which 2.3 remained on 200 mesh

2nd trial

17 grams thru of which 1.8 on 200 mesh

Under microscope its very fine single fibrous —

High viscosity seems to be
Bad — or short runs
Can't say which

Dallys 61 — 3 hours run
Temp 240° 632 V annually
Viscosity 12 mm 52 seconds
Viscosity taken after standing
45 hours
18 Scrapes Machine
55 Schedule
Transfers 4 stuck 2 frozen

1: two fine pull outs, (broke) 1/32 Conical
2 Red not filled 3 big ~~burrs~~ 1
side.. Cracked, Cracked, NG
3: Line red burrs on Margin.
1 bend Center Minute 1/8 wide 1/8 long
4 NG — 1/3rd Red lifted & Cracked
no weld
Red
Not welded
5 — Burrs Red lift up
6 Cracked
NG

Prints inspection

1 OK
2 OK
3 Longrun red apart not filled No 11 Transcriber
4 OK
5 Comed. Run not filled 1/16 To minus
6 OK Comed
7 OK — 8 OK — 9 OK, 10 OK
2 Transcribers discarded.

75%

1 fair to good — 2 good	faint VVV	
1 good 2 fair to good	VVV RO	
1 good 2 good	VV V	
1 good 2 good	no RO faint	
1 good 2 V good	VVVV VVVV	
1 good 2 good	V V V V	
1 good 2 good	not filled RO then VVV faint	
1 good 2 V good	faint no	
1 good 2 V good	no VVVV	
1 fair 2 good	no VV	

Wet finish after getting good seconds
Wet finish + Lumina + Lockerman
Cut off at 30 + Cooke
3 Cut 4 Lumina 75 4 Cooke
Clear cage

89

30 Scraper
3-7-1200 lbs 719 fine
55 Schedule 632 1574

83.3%

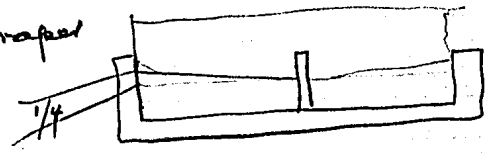
1 OK —
2 OK
3 Doubtful — Cook Center
4 OK slight red
5 OK " not filled
6 OK Dark red
7 OK slight red near edge
8 NG — Blister near rim Cracked
9 OK-Comed Red near rim
10 OK dark red near center
11 OK long red blister at rim 3" Long
12 OK slight red

Print —
"It is strange more than 1/2 of Records Cut —
It was rather Cold when tested — 60° fahr all night

Experiment on transfers

28 Scraper	100 run from	91 OK		91%
21 Scraper	213 "	186 OK		82.6
28 Scraper	156 "	135 OK		86.5
21 Scraper	472	436 OK		90.2
21 Scraper	283	260 OK		91.9
1=18 Scraper	100	80 "		
2 " "	100	86 "		83.25%
3 " "	100	85 "		
4 " "	100	82 "		

31 Scraper



31 Scraper #90

719 - 55 Schedule

Transfer 12 OK but 1 Cooked 4 dark red in Center

Prints inspection -

OK ||||| ||||| Several dark Red

Red Center, not filled good 1

Not filled out, run after increase 1 83.3%

Blank received at Cowles
10/1000 on each side -
719-18 Scrapper
5s

1 OK	Cowles -	OK otherwise
2 OK	"	"
3 OK	"	"
4 OK	"	not filled from margin out
5 OK	"	OK otherwise
6 OK	"	Red op at run, not filled in margin
7 OK	"	Not quite filled margins
8 OK	"	OK otherwise
9 OK	"	"
10 OK	"	"
Dup		
1 OK	"	"
2 OK	"	"
3 OK	"	not filled on 2 edges
4 OK	"	OK otherwise
5 OK	"	"
6 OK	"	"
7 OK	"	not quite fill on margins
8 OK	"	"
9 OK	"	OK otherwise
10 OK	"	"
11 OK	"	"

Would we have been using for tests lately
(Tracks)

✓ 434 old dope very shallow grooves in shaving blade
✓ 67 old dope M Sub Matrices, WM - old dope
✓ 18 old dope Sub M from WM matrices
✓ 42 old dope M " " New Dope
✓ 52 old dope M - " " new dope
✓ 14 old dope " " old dope
✓ 13 old dope M - " " old dope
✓ 17 old dope M " " old dope
✓ 9 old dope M " " old dope
✓ 50 old dope M " " New Dope
✓ 4 old dope M " " Old dope
3 old dope M " " old dope

Test for Run out only

434
434
67
67
18
42
52
14
13
17
9
50
4
3

Full height of line is a discard

Test of Dimmddies grafited tracked
White Marker by hand-feed in big
Cam Machine — twice over, Silk wheel
Velvet pad, 4 minutes —
1122-150 - G3
Celluloid print, just on limit of Edison
hearing for general surface, a good
many small snaps which probably
Comes from celluloid —
Surface on Celluloid OK - Harr
right inside Cabinet Best 2 2081
hebord having snaps — which there must
be over 100 weak ones

1122-151 - No G2 - On celluloid
at 1st can't hear general surface horn right in
funnel 1/3 across hear it very faintly + right
on my limit - Very few snaps in
this Compared to G3 = but there are
3 big snaps or 5 other weak snaps

G3 in condensite. 719 –
Has a blank RO. general surface Velvet and is good, to me its 4 times louder than Celluloid – To Dunwiddie & Moore its very little louder because they cannot gauge volume –
Less snaps than in Celluloid —
2nd G3 print weak Runouts VV surface about same as 1st Velvet, in regular previous test would be marked V good.

3rd Print G3 Condensite Bad blank RO – surface about same –
bad snaps near start,
RO all way across –

G2 Condensite –
VVV RO changing at def points –
Surface perhaps not so good as G3 but duller, Surface would be rated Velvet & Good – Same snaps as in Celluloid

2nd Print – V runouts 1/2 way then VVVV – surface about same as 1st pressing, Same snaps as in Celluloid

3rd Pressing, Snaps same –
1st 1/3 – VVV RO – surface Good Velvet.

This looks as if the grafted White Master & plating with Copper wk better –
is OK —

Dec 5 1913

New blanks run thru Comply
694 tested 206 Discarded

79 for knocks
57 Cracked
34 Run Out
25 Cracked
3 Poor print
3 Scratched
2 over Epoxy
1 Bad Label
1 Center Hole.

488 OK –
71%

Test for RO = No 1 OK for RO. but limit
2 Cant hear RO –
3 – little Too much RO on start
4 No RO
5 Has RO. but not bad enough to Reject
6 Limit for run out start.
7 No RO
8 Limit for RO.
9 Little Too much RO –
10 Limit of RO
11 Bad RO
12 "

new rack

2586-A Serenade Moskowski
Gustine Quartet -

On Celluloid — new,
Copper Dope Needles

only 2 or 3 small snaps —
surface is not dead velvet.

2565-A — Monte Cristo

Plated on old Dope

Shade more Velvet
than Moskowski — Not
much difference —

old Dope appears more velvet + more surface —

2589 C Voice trial
Aimee
Monte Cristo
Mae Graham
old Dope

12	11 OK	91.6
12	10	83.3
12	9	75.
12	8	66.6

12) 110 (91.6
108
20
12
8

12) 90 (75
84
60

12) 100 (8 3
96
4
36
4

12) 80 (66 6
72
80
72
8

30) 1500 (50
120
300
300

300 men a week

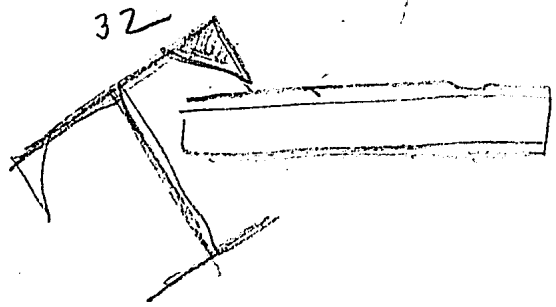
1

3.

3. 2.5.

50) 1000

32



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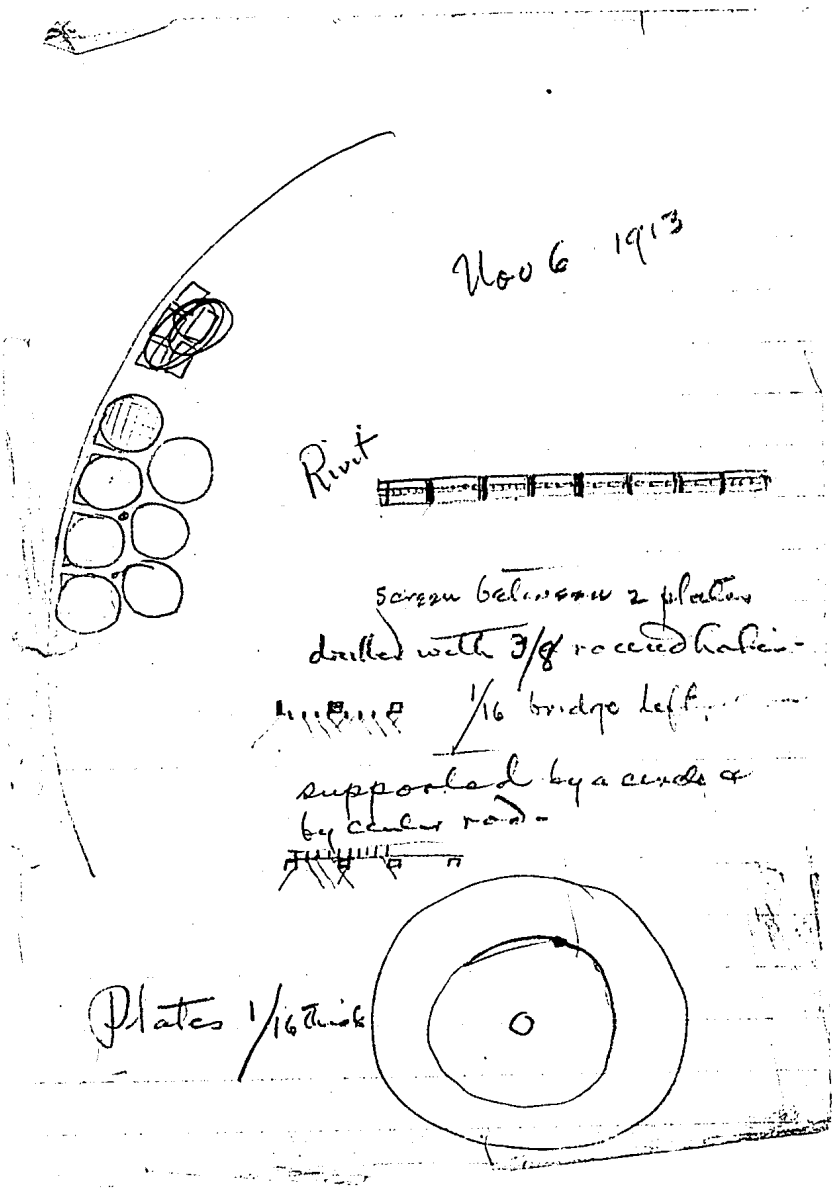
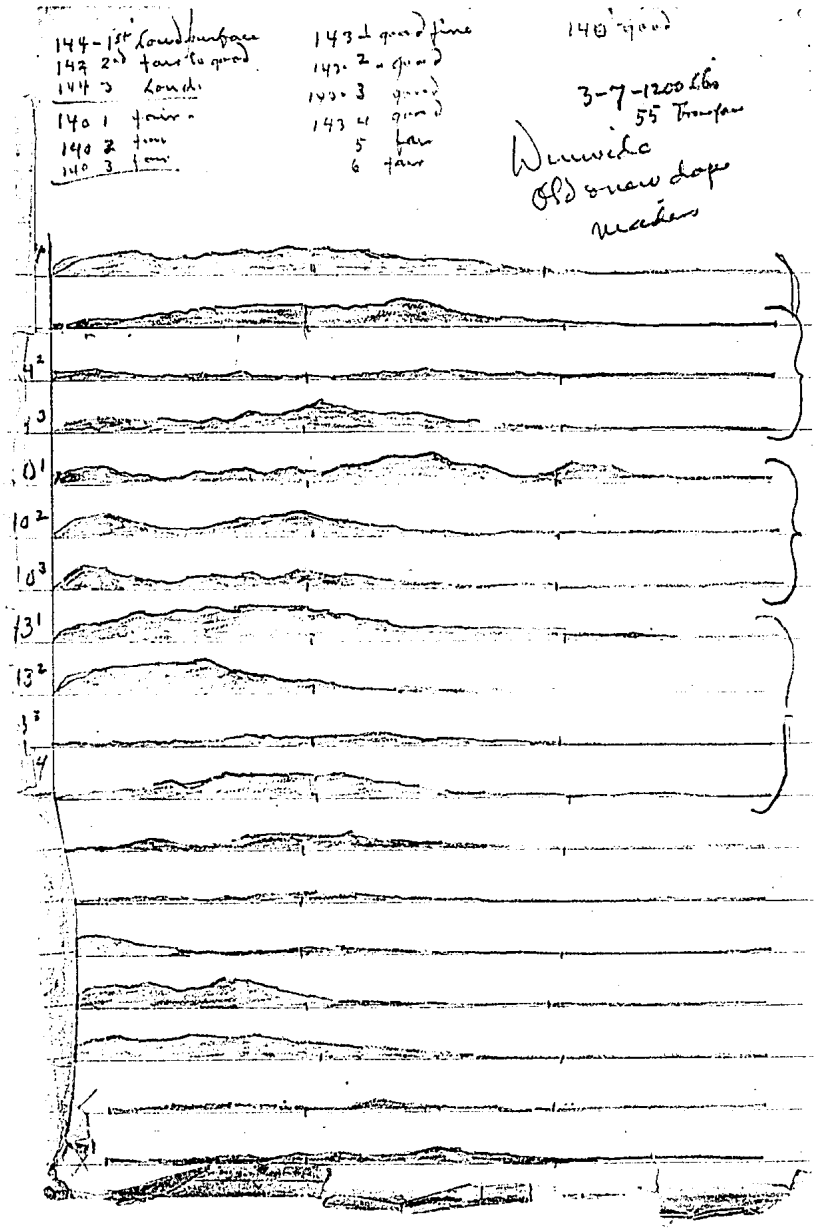
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